Title: TECHNIQUE TO CONTROL TUNNELING CURRENTS IN DRAM CAPACITORS, CELLS, AND DEVICES

REMARKS

Page 8

Dkt: 1303.017US2

This is in response to the Office Action mailed on January 13, 2005.

Claims 1, 3, 5, 7, 12, 15 and 18 are amended, no claims are canceled, and no claims are added; as a result, claims 1-21 remain pending in this application. Claims 1, 3, 5, and 18 have been amended to correct grammatical errors.

§103 Rejection of the Claims

Claims 7-10 and 12-17 were rejected under 35 USC § 103(a) as being unpatentable over Zhang et al. (U.S. 2003/0011009A1) in view of Riho et al. (U.S. 6,411,160). Both Zhang and Riho appear to be asserted under 35 USC § 102(e). Applicant does not admit that Zhang and Riho are indeed prior art and reserves the right to swear behind these references at a later date. Nevertheless the Applicant believes that the pending claims are distinguishable for at least the following reasons.

The rejection states that Zhang discloses a first source/drain region, a second source/drain region, a gate opposing a channel region between the first and second source/drain regions and the material forming the source/drain regions and the gate are materials having a work function greater than 4.1 eV.

Zhang appears to show a Schottky MOSFET having a source region 114, and a drain region 116. Metal silicide materials are discussed in Zhang as choices for the source region 114 and the drain region 116. However, Zhang (being a Schottky device) does not show a first p-doped source/drain region and a second p-doped source/drain region. Applicant respectfully submits that there is no motivation or teaching in Riho to cure the missing elements of Zhang.

In contrast, independent claims 7, 12, and 15 as amended include a first p-doped source/drain region and a second p-doped source/drain region. Because the cited references, either alone or in combination, do not show every element of Applicant's independent claims, a 35 USC § 103(a) rejection is not supported by the references. Reconsideration and withdrawal of the rejection is respectfully requested with respect to Applicant's independent claims 7, 12, and 15. Additionally, reconsideration and withdrawal of the rejection is respectfully requested with respect to the remaining claims that depend therefrom as depending on allowable base claims.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/721,585

Filing Date: November 25, 2003

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Allowable Subject Matter

Page 9 Dkt: 1303.017US2

Claims 1-6 and 18-21 were allowed. Applicant acknowledges and thanks the Examiner for the indication of allowance of these claims.

Claim 11 was objected to as being dependent upon a rejected base claim, but was indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Pursuant to the amendments and arguments presented above, Applicant has not rewritten claim 11 in independent form at this time. Applicant respectfully submits that claim 11 is in condition for allowance as depending from an allowable base claim.

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6944 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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By their Representatives,

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Page 10

Dkt: 1303.017US2

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this day of April, 2005.

FACIA LEE

Name

Signature